Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The Effect of Eight Weeks of FIFA+11 Program on Landing Error Scoring System and Knee Joint Repositioning Error After Functional Fatigue in Adolescent Girl Soccer Players with Dynamic Knee Valgus

Protocol summary

Study aim

The aim of this study is to investigate the effect of eight weeks of FIFA +11 injury prevention program on the landing error scoring system and knee joint repositioning error after applying functional fatigue in 13-17 year old female soccer players with dynamic knee valgus in the city of Kerman.

Design

The clinical trial will have two control and experimental groups, be single-blinded, and randomized. Randomization will be performed using the website www.randomizer.org.

Settings and conduct

This study will be conducted in Kerman city and at Shahin Football Academy. Players who meet all the inclusion criteria will be randomly divided into two control and experimental groups. In the pre-test, the player will first be given the LESS test and the knee joint repositioning error test. After that, the player will perform the fatigue protocol for five minutes and immediately after that, she will repeat the initial tests. After that, the experimental group will perform the FIFA +11 injury prevention program for eight weeks. After implementing the protocol, the post-test will be repeated as in the pre-test.

Participants/Inclusion and exclusion criteria

Female soccer players aged 13 to 17 years; with written consent from their guardians or parents to participate in the study; healthy players with no reports of pain; at least 2 years of experience playing soccer; and meeting the criteria for dynamic knee valgus.

Intervention groups

The FIFA +11 injury prevention program consists of three parts with a total of 15 different exercises that replace the usual warm-up program. This program will be applied to the experimental group for 8 weeks. The control group will continue their general warm-up.

Main outcome variables

Landing Error Scoring System (LESS) ; Knee Joint Repositioning Error

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20250818066901N1**
Registration date: **2025-09-24, 1404/07/02**
Registration timing: **prospective**

Last update: **2025-09-24, 1404/07/02**
Update count: **0**

Registration date

2025-09-24, 1404/07/02

Registrant information

Name

fatemeh asadi khanouki

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 34 3375 2839

Email address

ftm.asadi.80@sport.uk.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-10-07, 1404/07/15

Expected recruitment end date

2025-12-06, 1404/09/15

Actual recruitment start date

empty

Actual recruitment end date
empty
Trial completion date
empty

Scientific title
The Effect of Eight Weeks of FIFA+11 Program on Landing Error Scoring System and Knee Joint Repositioning Error After Functional Fatigue in Adolescent Girl Soccer Players with Dynamic Knee Valgus

Public title
The Effect of Eight Weeks of FIFA+11 Program on Landing Error Scoring System and Knee Joint Repositioning Error After Functional Fatigue in Adolescent Girl Soccer Players with Dynamic Knee Valgus
Purpose
Prevention
Inclusion/Exclusion criteria
Inclusion criteria:
Female soccer players aged 13 to 17 Written consent from guardian or parent to participate in the research Healthy player with no reports of pain At least 2 years of experience playing football With dynamic knee valgus
Exclusion criteria:
Players with a history of injury or illness Goalkeepers
Age
From **13 years** old to **17 years** old
Gender
Female

Phase
N/A
Groups that have been masked

- Participant

Sample size
Target sample size: **24**
Randomization (investigator's opinion)
Randomized
Randomization description
Players whose dynamic knee valgus criteria have been confirmed will be divided into the two groups of control and experimental by using the www.randomizer.org website.
Blinding (investigator's opinion)
Single blinded
Blinding description
After randomization, the experimental and control groups will be tested on separate days. The protocol for the experimental group will also be started before the team's group practice begins. The experimental group will be asked not to share information about the protocol with others.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Research Ethics Committee of Kerman University of Medical Sciences
Street address
Pajoohesh Sq., Shahid Bahonar University, Kerman
City
Kerman
Province
Kerman
Postal code
76169-14111
Approval date
2025-08-17, 1404/05/26
Ethics committee reference number
IR.KMU.REC.1404.274

Health conditions studied

1

Description of health condition studied
Dynamic knee valgus
ICD-10 code
M21.06
ICD-10 code description
Valgus deformity, not elsewhere classified, knee

Primary outcomes

1

Description
Landing Error Scoring System
Timepoint
In the pre-test before and after the fatigue, in the post-test before and after the fatigue
Method of measurement
LESS box, two video cameras, Kinovea software

2

Description
Knee joint repositioning error
Timepoint
In the pre-test before and after the fatigue, in the post-test before and after the fatigue
Method of measurement
Goniometer

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: FIFA +11 has three parts with a total of 15 different exercises that replace the usual warm-up program. The first part includes slow-paced running exercises, active stretching, and controlled contact with a partner. Running takes place around six to ten pairs of cones (depending on the number of players) that are between five and six meters apart (length and width). The running exercise includes running straight forward and running fast forward and backward. The second part includes six different sets of exercises: strength, balance, and jumping, each with three levels of increasing difficulty. The final part includes sprinting with soccer-specific movements, bonding, and cutting and changing direction exercises. The duration of each session is approximately 20 to 25 minutes. In the current study, this program will be performed three times a week for eight weeks under the supervision of the researcher.
Category
Prevention

2

Description
Control group: General warm-up group
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Shahin Football Club
Full name of responsible person
Fatemeh Asadi
Street address
Kerman, Kargar Street, Shahin Football Club
City
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7614843315
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Email
fatemeh.asadi.2201@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shahid Bahonar University of Kerman
Full name of responsible person
Alireza Saeedi
Street address
Pajoohesh Sq., Shahid Bahonar University, Kerman
City
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ftm.asadi.80@sport.uk.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shahid Bahonar University of Kerman
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Shahid Bahonar University of Kerman
Full name of responsible person
Fatemeh Asadi
Position
student
Latest degree
Bachelor
Other areas of specialty/work
Sports injury and corrective exercises
Street address
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
There is no further information.
Study Protocol
Yes - There is a plan to make this available
Statistical Analysis Plan
Not applicable
Informed Consent Form
Yes - There is a plan to make this available
Clinical Study Report
Not applicable
Analytic Code
Not applicable
Data Dictionary
Not applicable
Title and more details about the data/document
The protocol implemented in this project will be made available to the applicant through the corresponding author after the publication of the article.
When the data will become available and for how long
No.
To whom data/document is available
Students and researchers
Under which criteria data/document could be used
There is no specific case.
From where data/document is obtainable
Responsible author
What processes are involved for a request to access data/document
The applicant can communicate his/her request to the responsible author via email.
Comments